

REMARKS

Applicant's petition filed March 26, 2003 addresses point A on page 2 of the Office Action and the objection to the specification in point 3. Copies of the petition and of the return receipt confirming that the petition was received in the Patent and Trademark Office on March 26, 2003 are enclosed.

Claims 17-30 stand rejected under 35 USC 112, first paragraph. This is a new ground of rejection that was not necessitated by the amendments made in response to the previous Office Action, in that the claims previously of record referred to a flotation cell (see claims 1, 12, 14 and 16) and accordingly, if the references to a flotation cell in claims 17-30 render the description in the specification non-enabling, then the same rejection could and should have been made against the original claims instead of being held in reserve for a later Action. Applicant accordingly requests that finality of the rejection be withdrawn and that the amendments set forth above be entered.

Applicant respectfully traverses the rejection under 35 USC 112, first paragraph. The technology of flotation cells is well known, as shown, for example, by U.S. Patent 4,566,968, which corresponds to the Canadian publication mentioned on page 3 of the present application.

Claims 17-23 and 26-30 stand rejected under 35 USC 102 over Schofield and claims 24 and 25 stand rejected under 35 USC 103 over Schofield in view of Banner. Applicant has amended claim 17 and submits that claim 17 is patentable.

Claim 17, as now amended, refers to a flotation cell including a structure defining an outlet opening having a horizontal dimension and a vertical dimension. Support for the references in claim 17 to the horizontal dimension and vertical dimension of the outlet opening are found in FIG. 1 of the drawings and the description in the paragraph starting at page 3, line 30. The counterpart of the outlet opening is the outlet of the drainpipe 9 into the collecting pipe 10 and it is clear that this outlet opening has a vertical dimension and a horizontal dimension. Claim 17 further recites that the sensor element extends over substantially the entire vertical dimension of the outlet opening and has a width dimension that is substantially less than the horizontal dimension of the outlet opening. The reference to the vertical dimension is simply a restatement of the

previous reference to the transverse dimension of the outlet opening. The requirement that the width dimension of the sensor element be substantially less than the horizontal dimension of the outlet opening is supported by the paragraph starting at page 4, line 25, which states that the sensor element cuts the slurry flow in a narrow area.

Schofield discloses a flow meter for measuring flow of sewage from a pipe 12. The flow meter comprises an impact plate 14 mounted at the outlet end of the pipe 12 and shaped to cover substantially the entire opening defined by the pipe at its outlet end. The closest counterpart in Schofield of the sensor element referred to in claim 17 is the impact plate 14, but the width dimension of the impact plate is not substantially less than the horizontal dimension of the outlet opening of the pipe 12, as would be required in order to meet the limitations of claim 17. Further, the prior art does not suggest that the impact plate 14 should have a width dimension that is substantially less than the horizontal dimension of the outlet opening.

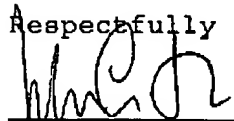
The examiner asserts that the outlet pipe 12 of Schofield constitutes a flotation cell within the meaning of claim 17. Applicant respectfully disagrees. A flotation cell is used for separating components of minerals and generally comprises a tank having a slurry inlet, a slurry outlet, and a rotor mounted in the tank for creating a froth that is discharged from the tank through a froth outlet. The only features in common between the pipe 12 of Schofield and a flotation cell are an inlet and an outlet. Applicant therefore submits that the pipe 12 does not constitute a flotation cell.

Claim 30 has been rewritten in independent form. The examiner asserts that the impact plate 14 of Schofield constitutes a rod within the meaning of claim 30. Applicant respectfully submits that the element 14 of Schofield, particularly when viewed in FIGS. 2, 7, 9 and 11, does not constitute a rod within any reasonable definition of that term. Applicant therefore submits that claim 30 is patentable over Schofield and it follows that the dependent claims 31-36 also are patentable.

The new claim 37 is written in independent form and not only recites that the sensor element is a rod but also recites that the rod has a length dimension such that the sensor element extends over

substantially the entire vertical dimension of the outlet opening. As discussed in connection with claim 30, applicant submits that the element 14 of Schofield does not constitute a rod within any reasonable definition of that term. In the circumstances, applicant submits that claim 37 is patentable over Schofield and it follows that the dependent claims 38-48 also are patentable.

Respectfully submitted,



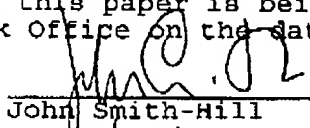
John Smith-Hill  
Reg. No. 27,730

SMITH-HILL & BEDELL, P.C.  
12670 NW Barnes Road, Suite 104  
Portland, Oregon 97229

Tel. (503) 574-3100  
Fax (503) 574-3197  
Docket: OUTO 2367

Certificate of Facsimile Transmission

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

  
John Smith-Hill

4/24/03  
Date

SENT BY: SH&B;

503 574 3197;

APR-24-03 4:00PM;

PAGE 13/16

03/26/03 10:38:13

USPTO->

503 574 3197 FAX

Page 001

TO: Auto-reply fax to 503 574 3197 COMPANY:

## Auto-Reply Facsimile Transmission



UNITED STATES  
PATENT AND  
TRADEMARK OFFICE  
★★★★

TO:

Fax Sender at 503 574 3197

Fax Information

Date Received:

Total Pages:

3/26/03 6:26:37 PM [Eastern Standard Time]

3 (including cover page)

**ADVISORY:** This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received  
Cover  
Page  
=====>

SENT BY: SH&B;	503 574 3197;	MAR-26-03 8:02PM;	PAGE 1
<b>Smith-Hill and Bedell, P.C.</b>		11070 NW Corner Rd., Suite 100 Portland, Oregon 97229 Telephone: (503) 574-3197 Facsimile: (503) 574-3197	
PATENT AND TRADEMARK ATTORNEYS			
John Smith-Hill David J. Bedell			
<b>FACSIMILE COVER SHEET</b>			
TO: Takhia S. Miller Art Unit 2855		FROM: John Smith-Hill	
FROM: US PATENT AND TRADEMARK OFFICE		DATE: March 26, 2003	
FAX: 1-703-872-9318		OUR REF: OUPD 2367	
YOUR REF: 09/980,439		PAGES: COVER + 2	
Received from <503 574 3197> at 3/26/03 8:26:37 PM [Eastern Standard Time]			

Received from <503 574 3197> at 4/24/03 6:53:12 PM [Eastern Daylight Time]

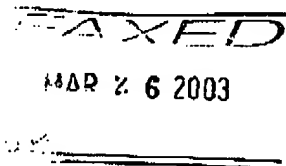
# Smith-Hill and Bedell, P.C.

PATENT AND TRADEMARK LAWYERS

12670 NW Barnes Rd., Suite 104  
Portland, Oregon 97229  
Telephone: (503) 574-3100  
Facsimile: (503) 574-3197

John Smith-Hill

Daniel J. Bedell



## FACSIMILE COVER SHEET

To: Takisha S. Miller  
Art Unit 2855

From: John Smith-Hill

Firm: US PATENT AND  
TRADEMARK OFFICE

Date: March 26, 2003

Fax: 1-703-872-9318

Our ref: OUTO 2367

Your ref: 09/980,439

Pages: Cover + 2

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Eljas SAASTAMOINEN et al

Art Unit: 2855

Application No: 09/980,439

Examiner:  
Takisha S. Miller

Filed: January 4, 2002

For: ARRANGEMENT FOR MEASURING  
CONCENTRATE FLOW IN CONNECTION WITH  
FLOTATION CELLPETITION UNDER 37 CFR 1.181(a)(1)Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In the Office Action mailed August 14, 2002, the examiner objected to the specification and demanded that section headings should be included in the disclosure. In the reply to the Office Action, applicant requested reconsideration of the examiner's requirement on the ground that Title 37, Code of Federal Regulations, does not require section headings in the specification of a patent application. In the Office Action mailed January 28, 2003, the examiner again required that section headings should be included in the specification.

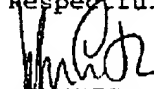
Applicant requests review of the examiner's position that 37 CFR 1.77 requires section headings in the specification of a patent application, petitions against the examiner's requirement in the Office Action mailed January 28, 2003 that section headings be provided in the specification, and requests a ruling confirming that there is no requirement in Title 37, Code of Federal Regulations, that section headings be included in the specification of a patent application. This petition is filed within two months of the mailing date of the action from which relief is requested.

The examiner asserts that 37 CFR 1.77 requires section headings. 37 CFR 1.77(c) says that the sections defined in paragraphs (b)(1) through (b)(11) of 37 CFR 1.77 should be preceded by a section heading. The word "should" expresses a preference or suggestion not a requirement. See 37 CFR 1.121(b)(2), which states "If the sections of the specification contain section headings..." and thereby clearly indicates that the sections might not contain section headings. Unlike a preference or suggestion, a requirement is

introduced by "must" or shall." See, for example, 37 CFR 1.63(a) ("An oath or declaration...must:..."), and 37 CFR 1.75(a) ("The specification must conclude with a claim...").

Applicant objects to being put to the expense and inconvenience of complying with a suggestion or preference that has been arbitrarily elevated to the status of a requirement without being subject to the procedures involved in rule making. In this case, the exchange of correspondence regarding section headings has consumed far more energy and attention than could possibly be justified by any perceived benefit to including section headings.

Respectfully submitted,



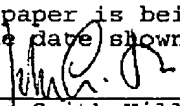
John Smith-Hill  
Reg. No. 27,730

SMITH-HILL & BEDELL, P.C.  
12670 NW Barnes Road, Suite 104  
Portland, Oregon 97229

Tel. (503) 574-3100  
Fax (503) 574-3197  
Docket: OUTO 2367

Certificate of Facsimile Transmission

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

  
John Smith-Hill

3/26/03  
Date

FAX RECEIVED

APR 24 2003

TECHNOLOGY CENTER 2800